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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/660,773 | 09/12/2003 | Kouichi Tada | 100341-00046 | 5773 |

4372 7590 10/17/2006

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EXAMINER

RIVERO, MINERVA

ART UNIT PAPER NUMBER

2627

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/660,773

Applicant(s)

TADA ET AL.

Examiner

Minerva Rivero

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-2 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. In the Remarks filed 8/02/06 Applicants submitted arguments for allowability of pending claims.

Response to Arguments

2. Applicants' arguments filed 8/2/06 have been fully considered but they are not persuasive.

Regarding claims 1 and 2, Applicants argue that the combined teachings of Ogihara and Ogawa do not disclose determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as the data cycle and identifying a disk, when the cycle of the wobble signal is 186 times, as a DVD-RW, and when the cycle of the wobble signal is 32 times, as a DVD+RW, since Ogihara discloses identifying a kind of disk based on a detection level.

The Examiner cannot concur with the Applicants. In Paragraph [0040], Ogihara discloses identifying a type of disk based on detection levels, *which correspond to amplitude values of the frequency components in question*. Thus the identification of the type of disk is based on the presence or absence of a particular frequency component. Ogawa states the standard clock frequency is 26.16MHz, which is approximately 32 times the standard groove wobble frequency of a DVD+RW (818 Khz), and 186 times the standard wobble frequency of a DVD-RW (140 KHz). Thus

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determining whether a groove cycle is 186 or 32 times as 'long' as a data cycle, the standard known to be 26.16 Mhz, is synonymous to determining whether an extracted frequency component is 818 Khz or 140 KHz, also standards in the art (see Ogihara, [0053], and Ogawa, [0145]). Therefore the claims stay rejected.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Ogawa provides evidence of standard values of wobble frequencies for DVD-RW and DVD+RW media, and effectively supplements the teachings of Ogihara.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ogihara (U.S. Publication 2002/0075780) in view of Ogawa (U.S. Publication 2002/0105864).

Regarding claim 1, Ogihara discloses a disk kind identifying method that identifies a DVD-RW or a DVD+RW ([0032]), comprising steps of: (a) detecting a wobble signal recorded on a recording surface of a disk ([0034] and [0035]); (b) determining whether a cycle of the detected wobble signal is 186 times or 32 times as long as a data cycle ([0027] and [0028]; Wobble cycle is determined based on frequency; Groove wobble frequency for a DVD-RW is 140kHz and groove wobble frequency for a DVD+RW is 810kHz); and (c) identifying, when the cycle of the wobble signal is 186 times, a kind of said disk as the DVD-RW and, when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW ([0040]).

Ogihara fails to disclose using the standard clock frequency and standard groove wobble frequency of a DVD+RW disk.

Ogawa discloses the standard clock frequency of 26.16 MHz ([0145]) and standard groove wobble frequency of a DVD+RW disk as 818 kHz ([0145]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify disk-identifying device of Ogihara with the standard recording signals of Ogawa.

Motivation for the combination is to achieve a DVD-RW wobble signal cycle of 186 times the data cycle and a DVD+RW wobble signal cycle of 32 times the data cycle ($186 \cdot 140\text{kHz} = 26.16\text{MHz}$ and $32 \cdot 818\text{kHz} = 26.16\text{MHz}$).

Regarding claim 2, Ogihara discloses a disk apparatus (Fig. 1) which identifies a DVD-RW or a DVD+RW and executes recording and reproducing depending upon a kind of an identified disk, comprising: a detector (Fig. 1, element 118) for detecting a wobble signal recorded on a recording surface of said disk; a determiner (Fig. 3, elements 121 and 122; see also [0034] and [0035]) for determining whether a cycle of the wobble signal detected by said detector is 186 times or 32 times as long as a data cycle ([0027] and [0028]; Wobble cycle is determined based on frequency; Groove wobble frequency for a DVD-RW is 140kHz and groove wobble frequency for a DVD+RW is 810kHz), and an identifier (Fig. 1, element 105; see also [0040]) for identifying, when the cycle of the wobble signal is 186 times, the kind of said disk as the DVD-RW and, when the cycle of the wobble signal is 32 times, the kind of said disk as the DVD+RW.

Ogihara fails to disclose using the standard clock frequency and standard groove wobble frequency of a DVD+RW disk.

Ogawa discloses the standard clock frequency of 26.16 MHz ([0145]) and standard groove wobble frequency of a DVD+RW disk as 818 kHz ([0145]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify disk-identifying device of Ogihara with the standard recording signals of Ogawa.

Motivation for the combination is to achieve a DVD-RW wobble signal cycle of 186 times the data cycle and a DVD+RW wobble signal cycle of 32 times the data cycle ($186 \cdot 140\text{kHz} = 26.16\text{MHz}$ and $32 \cdot 818\text{kHz} = 26.16\text{MHz}$).

Conclusion

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

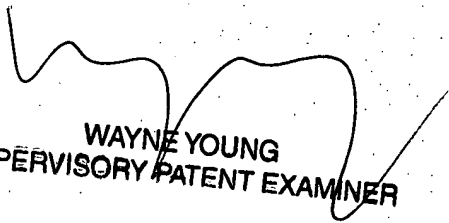
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Minerva Rivero whose telephone number is (571) 272-7626. The examiner can normally be reached on Monday-Friday 9:00 am - 6:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on (571) 272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MR 10/14/06


WAYNE YOUNG
SUPERVISORY PATENT EXAMINER